row. It is therefore desirable to provide a bursting technique that can accommodate data elements that are not contiguous in memory.

Please add the following paragraph on page 6, lines ~~15-16:~~ between 14-15

Figure 8 is a flow chart illustrating steps performed during the process of transferring vector data between a memory and a vector buffer according to an embodiment of the present invention.

Please replace the paragraph on 6, lines 20-25 with the following amended paragraph:

Figure 1 illustrates a computer system **100** which is a simplified example of a computer system with which the present invention may be utilized. It should be noted, however, that the present invention may be utilized in other computer systems having an architecture that is different from computer system **100**. Additionally, the present invention may be implemented in processing systems that do not necessarily include all the features represented in **Figure 1**.

Please replace the paragraph on page 7, lines 1-15 with the following amended paragraph:

Computer system 100 includes processor 102 coupled to host bus 104. External cache memory 106 is also coupled to the host bus 104. Host-to-PCI bridge 108 is coupled to main memory 110, includes cache memory 106 and main memory 110 control functions, and provides bus control to handle transfers among PCI bus 1 12, processor 102, cache memory 106, main memory 110, and host bus 104. PCI bus 112 provides an interface for a variety of devices including, for example, LAN card 114. PCI-to-ISA bridge 116 provides bus control to handle transfers between PCI bus 112 and ISA bus 127, IDE and universal serial bus (USB) functionality 120, and can include other functional elements not shown, such as a real-time clock (RTC), DMA control, interrupt support, and system management bus support. Peripheral devices and input/output (I/O) devices can be attached to various I/O interfaces 122 coupled to ISA bus 127. Alternatively, many I/O devices can be accommodated by a super I/O controller (not shown) attached to ISA bus 127. I/O devices such as modem 124 are coupled to the appropriate I/O interface, for example a serial interface as shown in Figure 1.

Serial No.: Unassigned